| Number | Hits | Search Text | DB | Time stamp |
|--------|--------|---|--|---------------------|
| 1 | 65 | @ad<=20010613 and 'silicon oxide' with 'Hafnium' with 'Lanthanum' | USPAT; US-PGPUB; EPO; JPO; DERWENT; | 2003/11/06 09:05 |
| 2 | 4 | (("6159855") or ("6013553")).PN. | IBM_TDB USPAT; US-PGPUB; EPO; JPO; DERWENT; | 2003/11/06 09:05 |
| 32 | 3 | <pre>@ad<=20010113 and 'hafnium' and 'sputtering' and 'ion bombardment' with 'eV'</pre> | IBM_TDB USPAT; US-PGPUB; EPO; JPO; DERWENT; | 2003/11/06 09:10 |
| 33 | 39 | @ad<=20010613 and 'MOS' and 'Hafnium oxide' with 'Lanthanum oxide' | IBM_TDB USPAT; US-PGPUB; EPO; JPO; DERWENT; | 2003/11/06 09:11 |
| 34 | 2 | <pre>@ad<=20010613 and 'hafnium' adj 'silicon oxide'</pre> | IBM_TDB USPAT; US-PGPUB; EPO; JPO; DERWENT; | 2003/11/06 09:16 |
| 35 | 58 | @ad<=20010613 and 'dielectric' with 'Hafnium' same 'Lanthanum' | IBM_TDB USPAT; US-PGPUB; EPO; JPO; DERWENT; | 2003/11/06 09:17 |
| - | 69 | (438/722).CCLS. | IBM_TDB USPAT; US-PGPUB; EPO; JPO; DERWENT; | 2003/05/21 13:25 |
| - | 69 | (("438/722").CCLs.) and @ad<=20010613 | IBM_TDB USPAT; US-PGPUB; EPO; JPO; DERWENT; | 2003/05/21 15:27 |
| - | 223162 | 438/\$.ccls. or 257/\$.ccls. and @ad<=20010113 | IBM_TDB USPAT; US-PGPUB; EPO; JPO; DERWENT; | 2002/06/25 16:06 |
| - | 35716 | (438/\$.ccls. or 257/\$.ccls. and @ad<=20010113) and 'dielectric' | IBM_TDB USPAT; US-PGPUB; EPO; JPO; DERWENT; | 2002/02/14 14:15 |
| - | 4864 | ((438/ $\$$.ccls. or 257/ $\$$.ccls. and @ad<=20010113) and 'dielectric') and 'mosfet' | IBM_TDB USPAT; US-PGPUB; EPO; JPO; DERWENT; | 2002/02/14 14:12 |
| - | 1 | (((438/\$.ccls. or 257/\$.ccls. and @ad<=20010113) and 'dielectric') and 'mosfet') and 'group IV metal' | IBM_TDB USPAT; US-PGPUB; EPO; JPO; DERWENT; | 2002/02/14 14:14 |
| - | 16571 | (438/5.ccls. or 257/5.ccls. and @ad<=20010113) and 'dielectric layer' | IBM_TDB USPAT; US-PGPUB; EPO; JPO; DERWENT; | 2002/02/14 14:21 |
| - | 61 | ((438/\$.ccls. or 257/\$.ccls. and @adc=20010113) and 'dielectric layer') and 'hafnium' and 'lanthanum' | IBM_TDB USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/08/27 16:46 |

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| - | 104 | ((438/\$.ccls. or 257/\$.ccls. and | USPAT; | 2002/02/14 |
|-----|--------|---|------------------------|------------|
| | 1 | (dad<=20010113) and 'dielectric') and 'hafnium' and 'lanthanum' | US-PGPUB; | 14:25 |
| | 1 | 'nainium' and 'lanthanum' | EPO; JPO; DERWENT; | |
| | | | IBM TDB | |
| | 36 | ((438/\$.ccls. or 257/\$.ccls. and | USPAT; | 2002/02/14 |
| 1 | 50 | @ad<=20010113) and 'dielectric') and | US-PGPUB; | 14:26 |
| 1 | | 'amorphous oxide' | EPO; JPO; | 11.20 |
| | | | DERWENT: | |
| ì | | | IBM TDB | |
| - | 1 | ((438/\$.ccls. or 257/\$.ccls. and | USPAT; | 2002/02/14 |
| | | @ad<=20010113) and 'dielectric') and | US-PGPUB; | 14:26 |
| | | 'hafnium' and 'lanthanum' and 'amorphous | EPO; JPO; | |
| | | oxides' | DERWENT; | |
| | 224025 | 438/\$.ccls. or 257/\$.ccls. and | IBM_TDB USPAT; | 2002/06/25 |
| ļ - | 224025 | 436/5.0018. OF 25//5.0018. and @ad<=20010613 | US-PGPUB; | 11:50 |
| 1 | 1 | 6441-20010013 | EPO; JPO; | 111.50 |
| ĺ | i | | DERWENT; | |
| | l | | IBM TDB | |
| - | 15 | (438/\$.ccls. or 257/\$.ccls. and | USPAT; | 2002/02/15 |
| | | @ad<=20010613) and 'mosfet' and | US-PGPUB; | 10:49 |
| | 1 | 'dielectric metal oxide' | EPO; JPO; | |
| Ì | ì | | DERWENT; | |
| Į. | 100- | (430/0 -1 057/0 1 | IBM_TDB | |
| _ | 4906 | (438/\$.ccls. or 257/\$.ccls. and | USPAT; | 2002/02/15 |
| | } | @ad<=20010613) and 'mosfet' and 'dielectric' | US-PGPUB; EPO; JPO; | 10:51 |
| | | dielectric | DERWENT; | |
| | | | IBM TDB | |
| | 73 | ((438/\$.ccls. or 257/\$.ccls. and | USPAT; | 2002/06/25 |
| | 1 | @ad<=20010613) and 'mosfet' and | US-PGPUB; | 15:23 |
| 1 | 1 | 'dielectric') and 'hafnium' | EPO; JPO; | 1 |
| | | | DERWENT; | |
| | | | IBM_TDB | |
| - | 24 | | USPAT; | 2002/02/15 |
| | | @ad<=20010613) and 'mosfet' and | US-PGPUB; | 10:55 |
| 1 | i | 'dielectric') and 'hafnium') and | EPO; JPO; DERWENT; | |
| l | I | 'lanthanum' | IBM TDB | |
| _ | 2 | ("6020024").PN. | USPAT; | 2002/02/15 |
| | - | (0020024 / | US-PGPUB; | 11:22 |
| 1 | | | EPO; JPO; | |
|) |] | | DERWENT; | |
| | l | | IBM TDB | (|
| - | 4 | ("4432035").PN. | USPAT; | 2002/02/15 |
| 1 | 1 | | US-PGPUB; | 13:44 |
| 1 | | | EPO; JPO; | |
| 1 | 1 | | DERWENT; IBM TDB | |
| - | 417 | (257/411).CCLS. | USPAT; | 2002/02/15 |
| | 1 11/ | (23775217,00003. | US-PGPUB; | 16:09 |
| 1 | 1 | | EPO; JPO; | |
| 1 | 1 | | DERWENT; | |
| 1 | i . | | IBM_TDB | |
| - | 5 | (("257/411").CCLS.) and 'hafnium' and | USPAT; | 2002/02/15 |
| | | 'lanthanum' | US-PGPUB; | 13:46 |
|) | i | | EPO; JPO; | |
| l. | Į. | | DERWENT; IBM TDB | Į. |
| 1_ | 230369 | 438/\$.ccls. or 257/\$.ccls. and | USPAT; | 2002/06/25 |
| - | 230368 | 438/\$.CCIS. OF 25//\$.CCIS. and @ad<=20010613 | US-PGPUB; | 11:54 |
| 1 | 1 | 644. 20020013 | EPO; JPO; | |
| ì | 1 | | DERWENT; | |
| | [| | IBM TDB | l . |
| - | 168 | (438/\$.ccls. or 257/\$.ccls. and | USPAT; | 2002/12/23 |
| 1 | | @ad<=20010613) and 'hafnium' and | US-PGPUB; | 12:14 |
| 1 | 1 | 'lanthanum' | EPO; JPO; | |
| 1 | 1 | | DERWENT; | |
| | | | IBM TDB | 1 |

| - | 2 | (438/\$.ccls. or 257/\$.ccls. and | USPAT; | 2002/06/25 |
|-----|-----|---|------------------------|---------------------|
| i | | @ad<=20010613) and 'hafnium' and 'combining' with 'oxygen' | US-PGPUB; EPO; JPO; | 12:02 |
| 1 | | demanding with onlygen | DERWENT; | |
| | | | IBM_TDB | 1 |
| - | 91 | (438/\$.ccls. or 257/\$.ccls. and @ad<=20010613) and 'hafnium' with | USPAT; US-PGPUB; | 2002/06/25 |
| | | 'oxygen' | EPO; JPO; | 12:07 |
| | | | DERWENT; | |
| _ | 67 | 'hafnium' with 'reaction' with 'oxygen' | IBM_TDB USPAT; | 2002/06/25 |
| ł | 1 | nathrum with reaction with oxygen | US-PGPUB; | 12:32 |
| 1 | | | EPO; JPO; | |
| | | | DERWENT; | 1 |
| - | 3 | 'hafnium oxide' near 'formation' | IBM_TDB USPAT; | 2002/06/25 |
| l | | | US-PGPUB; | 12:33 |
| 1 | | | EPO; JPO; | 1 |
| | | | DERWENT; IBM TDB | 1 |
| - | 5.8 | (438/\$.ccls. or 257/\$.ccls. and | USPAT; | 2002/06/25 |
| ! | | @ad<=20010613) and 'silicon oxide' and 'hafnium' and 'lanthanum' | US-PGPUB; | 15:42 |
| | | narnium and lanthanum | EPO; JPO; DERWENT; | |
| | 1 | | IBM TDB | |
| - | 51 | (438/\$.ccls. or 257/\$.ccls. and | USPAT; | 2002/06/25 |
| | 1 | @ad<=20010613) and 'metal' with 'reduces' with 'silicon oxide' | US-PGPUB; EPO; JPO; | 13:42 |
| | | reduces with Silicon Oxide | DERWENT; | |
| | | 400 (000) | IBM_TDB | |
|] - | 199 | (438/785).ccls. and @ad<=20010613 | USPĀT; US-PGPUB; | 2003/05/21 15:27 |
| | | | EPO; JPO; | 13.2/ |
| | | | DERWENT; | |
| _ | 51 | ((438/785).ccls. and @ad<=20010613) and | IBM_TDB USPAT; | 2002/06/25 |
| | 31 | 'Hf' | US-PGPUB; | 14:05 |
| 1 | | | EPO; JPO; | |
| | 1 | | DERWENT; IBM TDB | } |
| - | 32 | ((438/785).ccls. and @ad<=20010613) and | USPAT; | 2003/05/21 |
| 1 | 1 | 'Hafnium' | US-PGPUB; | 14:07 |
| | | | EPO; JPO; DERWENT; | |
| | | | IBM TDB | |
| - | 4 | ("4432035").PN. | USPAT; | 2002/06/25 |
| | ! | | US-PGPUB; EPO; JPO; | 14:32 |
| | | | DERWENT; | |
| | | | IBM_TDB | |
| - | 1 | "2693629".PN. | USPAT | 2002/06/25 |
| - | 1 | "3819990".PN. | USPAT | 2002/06/25 |
| | | HARCOTAN PRO | | 14:35 |
| - | 1 | "4062749".PN. | USPAT | 2002/06/25 |
| - | 1 | "4227944".PN. | USPAT | 2002/06/25 |
| | | | | 14:38 |
| - | 1 | "5106827".PN. | USPAT | 2002/06/25 |
| - | 1 | "5106827".PN. | USPAT | 2002/06/25 |
| | | #5107530# PM | | 15:21 |
| - | 1 | "5187638".PN. | USPAT | 2002/06/25 15:21 |
| - | 1 | "5188902".PN. | USPAT | 2002/06/25 |
| | | | | 15:21 |
| - | 1 | "5273927".PN. | USPAT | 2002/06/25 |
| ~ | 1 | "6177361".PN. | USPAT | 2002/06/25 |
| | | | | 15:22 |
| - | 1 | "5824590".PN. | USPAT | 2002/06/25 |
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| - | 1 | "5773314".PN. | USPAT | 2002/06/25 |
|---|--------|---|--|---------------------|
| - | 1 | "5572052".PN. | USPAT | 2002/06/25 |
| - | 90 | ((438/\$.ccls. or 257/\$.ccls. and '@ad<=20010613) and 'mosfet' and 'dielectric') and 'hafnium' | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/06/25 16:05 |
| - | 0 | @ad<=20010613 and 'reduces' with 'silicon dioxide to silicon' | USPAT; US-PGPUB; EPO; JPO; DERWENT; | 2002/06/25 15:44 |
| - | 1028 | @ad<=20010613 and 'reduces' with 'silicon dioxide' with 'silicon' | IBM_TDB USPAT; US-PGPUB; EPO; JPO; DERWENT; | 2002/06/25 15:47 |
| - | 29 | @ad<=20010613 and 'reduces' adj 'silicon dloxide' with 'silicon' | IBM_TDB USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/06/25 16:01 |
| - | 4 | @ad<=20010613 and 'hafnium' adj 'silicon dioxide' | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/06/25 15:55 |
| | 1 | @ad<=20010613 and 'hafnium' adj 'silicon oxide' | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2003/11/06 09:16 |
| _ | 126214 | 438/\$.ccls. or 257/\$.ccls. and @ad<=20010113 and 'high dielectric' | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/06/25 16:09 |
| _ | 124737 | 438/\$.ccls. or 257/\$.ccls. and @ad<=20010113 and 'high dielectric' and 'silicon oxide' and 'hafnium' | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/07/11 08:52 |
| - | 31 | @ad<=20010113 and 'PVD' with 'ion bombardment' | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/07/11 11:45 |
| - | 393 | <pre>@ad<=20010113 and 'high dielectric' and 'physical vapor deposition' or 'PVD' with 'ion bombarment'</pre> | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/07/11 09:01 |
| - | 393 | <pre>@ad<=20010113 and 'high dielectric' and 'physical vapor deposition' or 'PVD' with 'lon bombarment energy'</pre> | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/07/11 09:04 |
| - | 13419 | @ad<=20010113 and 'high dielectric constant' | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/07/11 09:08 |
| - | 332 | (@ad<=20010113 and 'high dielectric constant') and 'physical vapor deposition' | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/07/11 09:09 |

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| - | 0 | ((@ad<=20010113 and 'high dielectric | USPAT; | 2002/07/11 |
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| | 1 | constant') and 'physical vapor deposition') and 'ion bombardment | US-PGPUB; EPO; JPO; | 09:10 |
| 1 | | energy' | DERWENT; | (|
| 1 | 1 | | IBM TDB | |
| - | 16 | ((@ad<=20010113 and 'high dielectric | USPAT; | 2002/07/11 |
| 1 | l | constant') and 'physical vapor | US-PGPUB; | 09:10 |
| | 1 | deposition') and 'ion bombardment' | EPO; JPO; | |
| 1 | j | | DERWENT; IBM TDB | 1 |
| - | 1 | "4495219".PN. | USPAT | 2002/07/11 |
| | 1 | | | 10:00 |
| - | 1 | "6013553".PN. | USPAT | 2002/07/11 |
| 1_ | 1 | "6015739".PN. | | 10:00 |
| 1 | 1 | 0013739 .FN. | USPAT | 2002/07/11 |
| - | 1 | "5464792".PN. | USPAT | 2002/07/11 |
| | | | | 10:00 |
| - | 1 | "6020024".PN. | USPAT | 2002/07/11 |
| _ | ١, | "6020243".PN. | USPAT | 10:01 |
| | | *************************************** | ODIAL | 10:01 |
| - | 1 | "6060755".PN. | USPAT | 2002/07/11 |
| | l . | # C110704# PV | | 10:01 |
| 1- | 1 | "6110784".PN. | USPAT | 2002/07/11 |
| - | 6 | @ad<=20010113 and 'hafnium deposition' | USPAT; | 2002/07/11 |
| 1 | 1 | and marinam deposition | US-PGPUB; | 11:46 |
| | | | EPO; JPO; | |
| | | | DERWENT; | |
| 1_ | 22 | @ad<=20010113 and 'hafnıum' and 'PVD' and | IBM_TDB USPAT; | 2002/07/11 |
| - | 22 | 'ion bombardment' | US-PGPUB; | 11:52 |
| | | 2-11 2-11-12 411-110 | EPO; JPO; | 11.02 |
| | | | DERWENT; |] |
| 1_ 1 | 3 | And = 20010113 and the feeting 1 and 1 2001 | IBM_TDB | 2002 (07 (11 |
| - | 3 | @ad<=20010113 and 'hafnium' and 'PVD' and 'ion bombardment' and 'eV' | USPAT; US-PGPUB; | 2002/07/11 |
| | | Tour Sourse Touristic dild 64 | EPO; JPO; | ***** |
| } | | | DERWENT; | |
| 1 | | | IBM_TDB | |
| 1- | 3 | @ad<=20010113 and 'hafnium' and | USPAT; | 2003/11/06 |
| 1 | | 'sputtering' and 'ion bombardment' with 'eV' | US-PGPUB; EPO; JPO; | 09:10 |
| | | •• | DERWENT; | |
| | | A CONTRACTOR OF THE CONTRACTOR | IBM_TDB | |
| - | 53 | @ad<=20010113 and 'metal' and | USPAT; | 2002/07/11 |
| | | 'sputtering' and 'ion bombardment' with 'eV' | US-PGPUB; EPO; JPO; | 12:56 |
| | | | DERWENT; | |
| 1 | | | IBM TDB | |
| 1- 1 | 1 | "4520413".PN. | USPAT | 2002/07/11 |
| 1_ 1 | 1 | "5930611".PN. | USPAT | 13:08 |
|] | 1 | System .FM. | OSPAI | 13:08 |
| - | 1 | "6054331".PN. | USPAT | 2002/07/11 |
| | | | | 13:09 |
|] - | 1 | "6060391".PN. | USPAT | 2002/07/11 |
| - | 1 | "6069070".PN. | USPAT | 13:11 2002/07/11 |
| | - 1 | | VOIAI | 13:12 |
| - | 266 | @ad<=20010113 and 'hafnium' with | USPAT; | 2002/07/11 |
| | | 'sputtering' | US-PGPUB; | 13:15 |
| | j | | EPO; JPO; | |
| 1 | i | | DERWENT; IBM TDB | 1 |
| 1- | 22 | @ad<=20010113 and 'hafnium' and 'PVD' and | USPAT; | 2002/07/23 |
| 1 1 | J | 'ion bombardment' | US-PGPUB; | 12:01 |
| 1 1 |) | | EPO; JPO; | 1 |
| 1 | ļ | | DERWENT; IBM TDB | |
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| - | 22 | @ad<=20010613 and 'hafnium' and 'PVD' and 'ion bombardment' | USPAT; US-PGPUB; EPO; JPO; DERWENT; | 2002/07/23 12:09 |
|---|-----|---|--|------------------------------|
| - | 1 | "4173661".PN. | IBM_TDB USPAT | 2002/07/23 |
| - | 1 | "5773363".PN. | USPAT | 12:08 2002/07/23 12:08 |
| | 5 | @ad<=20010613 and 'hafnium' and 'PVD' and 'ion bombardment' with 'energy' | USPAT; US-PGPUB; EPO; JPO; DERWENT; | 2002/07/23 13:16 |
| - | 6 | @ad<=20010613 and 'PVD' and 'ion bombardment' with 'eV' | IBM_TDB USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/07/23 12:40 |
| - | 3 | <pre>@ad<=20010613 and 'hafnium' and 'ion bombardment' with 'eV'</pre> | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/07/23 12:52 |
| - | 29 | @ad<=20010613 and 'PVD' and 'oxygen radical' | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/07/23 |
| - | 67 | @ad<=20010613 and 'sputter' and 'oxygen radical' | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/07/23 |
| - | 19 | @ad<=20010613 and 'hafnium' and 'sputter' with 'eV' | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/07/23 |
| - | 4 | @ad<=20010613 and 'hafnium' and 'sputter'and 'oxygen radical' with 'eV' | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/07/23 |
| | 6 | <pre>@ad<=20010613 and 'hafnium' and 'Ionized' with 'eV'</pre> | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/07/23 |
| - | 14 | <pre>@ad<=20010613 and 'hafnium' and 'ion bombardment' and 'sputter' and 'eV'</pre> | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/07/23 |
| - | 912 | @ad<=20010613 and 'dielectric deposition' | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/07/23 |
| - | 118 | (@ad<=20010613 and 'dielectric deposition') and 'refractory metal' | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/07/23 13:09 |
| - | 1 | ((@ad<=20010613 and 'dielectric deposition') and 'refractory metal') and 'sputter' and 'eV' | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/07/23 13:09 |

| - | 0 | ((@ad<=20010613 and 'dielectric deposition') and 'refractory metal') and | USPAT; US-PGPUB; | 2002/07/23 |
|-----|-----|--|------------------------|------------|
| 1 | | 'PVD' and 'eV' | EPO; JPO; | 13.09 |
| 1 | | | DERWENT; | i |
| _ | 12 | (@ad<=20010613 and 'dielectric | IBM_TDB USPAT; | 2002/07/23 |
| | 1 | deposition') and 'hafnium' | US-PGPUB; | 13:09 |
| | | | EPO; JPO; | |
| 1 | 1 | | DERWENT; IBM TDB | ì |
| - | 6 | @ad<=20010613 and 'hafnium deposition' | USPAT; | 2002/07/23 |
| | | | US-PGPUB; | 13:15 |
| | | | EPO; JPO; DERWENT; | |
| 1 | 1 | | IBM TDB | |
| - | 96 | @ad<=20010613 and 'ion bombardment' with | USPAT; US-PGPUB; | 2002/07/23 |
| | 1 | ev | EPO; JPO; | 13:19 |
| | | | DERWENT; | |
| _ | | (@ad<=20010613 and 'ion bombardment' with | IBM_TDB USPAT; | 2002/07/23 |
| | , | 'eV') and 'hafnium' | US-PGPUB; | 13:20 |
| | | | EPO; JPO; | |
| | | | DERWENT; IBM TDB | |
| - | 2 | ("6399521").PN. | USPAT; | 2002/07/23 |
| | | | US-PGPUB; | 14:33 |
| | | | EPO; JPO; DERWENT; | |
| | | | IBM_TDB | |
| - | 78 | | USPAT; | 2002/12/23 |
| 1 | | @ad<=20010113) and 'dielectric layer') and 'hafnium' and 'lanthanum' | US-PGPUB; EPO; JPO; | 12:15 |
| | | | DERWENT; | |
| - | 108 | ((438/\$.ccls. or 257/\$.ccls. and | IBM_TDB USPAT; | 2002/12/24 |
| | 100 | @ad<=20010113) and 'dielectric laver') | US-PGPUB; | 08:21 |
| 1 | | and 'hafnium' and 'lanthanum' | EPO; JPO; |) |
| | | | DERWENT; IBM TDB | į. |
| | 8 | @ad<=20010113 and 'dielectric layer' and | USPAT; | 2002/12/24 |
| | | 'hafnium' and 'lanthanum' and 'oxygen' and 'ion bombardment' | US-PGPUB; EPO; JPO; | 08:33 |
| | | and fon bombardment | DERWENT; | |
| | | | IBM_TDB | |
| - | 29 | @ad<=20010113 and 'physical vapor deposition' and 'hafnium' and 'oxygen' | USPAT; US-PGPUB; | 2002/12/24 |
| | | and 'ion bombardment' | EPO; JPO; | |
| | | | DERWENT; IBM TDB | |
| - | 62 | @ad<=20010113 and 'dielectric' and | USPAT; | 2002/12/24 |
| | | 'physical vapor deposition' and 'ion | US-PGPUB; | 08:40 |
| | | bombardment' same 'energy' | EPO; JPO; DERWENT; | |
| | | | IBM_TDB | |
| - | 120 | @ad<=20010113 and 'physical vapor | USPAT; US-PGPUB; | 2002/12/24 |
| | | deposition' and 'ion bombardment' same 'energy' | EPO; JPO; | V0:4U |
| (| | | DERWENT; | |
| - | 1.4 | @ad<=20010113 and 'hafnium' and 'physical | IBM_TDB USPAT; | 2002/12/24 |
| | 1.9 | vapor deposition' and 'ion bombardment' | US-PGPUB; | 08:53 |
| | | same 'energy' | EPO; JPO; | |
| [. | | | DERWENT; IBM TDB | |
| - | 2 | @ad<=20010113 and 'lanthanum' and | USPAT; | 2002/12/24 |
| | | 'physical vapor deposition' and 'ion bombardment' same 'energy' | US-PGPUB; EPO; JPO; | 08:41 |
| 1 | | nounatoment, same .energh. | DERWENT; | 1 |
| | | L | IBM TDB | |

| - | 14 | @ad<=20010113 and 'physical vapor deposition' same 'hafnium oxide' | USPAT; US-PGPUB; | 2002/12/24 |
|-----|------|---|------------------------|------------|
| 1 | | | EPO; JPO; DERWENT; | |
| 1 | | | IBM TDB | |
|] - | 4 | @ad<=20010113 and 'hafnium' and 'electron | USPAT; | 2002/12/24 |
| } | 1 | beam evaporation' and 'ion bombardment' and '10 eV' | US-PGPUB; EPO; JPO; | 08:59 |
| Į. | ļ | | DERWENT; | |
| | | 0-4-20010112 1 1211 | IBM_TDB | 2000/10/04 |
| 1 |] 3 | @ad<=20010113 and 'lanthanum' and 'electron beam evaporation' and 'ion | USPAT; US-PGPUB; | 2002/12/24 |
| | ł | bombardment' and '10 eV' | EPO; JPO; | |
| | | | DERWENT; IBM TDB | |
| - | 2 | @ad<=20010113 and 'lanthanum' and | USPAT; | 2002/12/24 |
| | 1 | 'hafnium' and 'oxygen radical' | US-PGPUB; | 09:40 |
| 1 | j . | | EPO; JPO; DERWENT; | |
| | ļ | | IBM TDB | |
| - | 2 | ("6387761").PN. | USPAT; | 2003/05/21 |
| | | | US-PGPUB; EPO; JPO; | 13:36 |
| | 1 | | DERWENT; | |
| _ | 2 | ("6159855").PN. | IBM_TDB USPĀT; | 2003/05/21 |
| | - | (0139033).FN. | US-PGPUB; | 13:38 |
| | | | EPO; JPO; | |
| | 1 | | DERWENT; IBM TDB | |
| - | 2 | ("6013553").PN. | USPAT; | 2003/05/21 |
| | | | US-PGPUB; | 13:38 |
| | | | EPO; JPO; DERWENT; | |
| |] | | IBM TDB | |
| - | 2178 | @ad<=20010613 and 'Hafnium' same 'Lanthanum' | USPAT; US-PGPUB; | 2003/05/21 |
| | ! | Lanchandin | EPO; JPO; | 16:05 |
| | | | DERWENT; | |
| _ | 5.2 | @ad<=20010613 and 'dielectric' with | IBM_TDB USPAT; | 2003/11/06 |
| | | 'Hafnium' same 'Lanthanum' | US-PGPUB; | 09:17 |
| | | | EPO; JPO; DERWENT; | |
| ĺ | | | IBM TDB | (|
| - | 39 | | USPAT; | 2003/05/21 |
| 1 | 1 | 'second' with 'La' | US-PGPUB; EPO; JPO; | 14:42 |
| | 1 | | DERWENT; | |
| | 274 | @ad<=20010613 and 'first' with 'Group IV' | IBM_TDB USPAT; | 2003/05/21 |
| - | 2/4 | and 'second' with 'Group III' | USPAT; US-PGPUB; | 14:45 |
| | | | EPO; JPO; | |
| 1 | 1 | | DERWENT; IBM_TDB | |
| - | 16 | @ad<=20010613 and 'first' with 'Group | USPAT; | 2003/05/21 |
| | | IVB' and 'second' with 'Group IIIB' | US-PGPUB; | 15:06 |
| | | | EPO; JPO; DERWENT; | |
| | | l | IBM_TDB | 1 |
| - | 243 | (438/785).ccls. and @ad<=20010613 | USPAT; US-PGPUB; | 2003/05/21 |
| | | | EPO; JPO; | 1 |
| | | | DERWENT; | |
| - | 83 | (438/722).CCLS. and @ad<=20010613 | IBM_TDB USPAT; | 2003/05/21 |
| | 33 | | US-PGPUB; | 15:31 |
| | ! | | EPO; JPO; DERWENT; | |
| | | | IBM TDB | |
| | | | | |

| - | 457 | (257/411).CCLS. and @ad<=20010613 | USPAT; | 2003/05/21 |
|-----|-----|---|------------------------|------------|
| | | | US-PGPUB; | 15:31 |
| [| į. | | EPO; JPO; DERWENT; | |
| i | | | IBM TDB | |
| j - | 597 | (257/310).CCLS. and @ad<=20010613 | USPAT; | 2003/05/21 |
| 1 | | , | US-PGPUB; | 15:32 |
| 1 | i | | EPO; JPO; | |
| Į. | į. | | DERWENT; | ! |
| | ĺ | | IBM_TDB | |
| - | 461 | (257/410).CCLS. and @ad<=20010613 | USPAT; | 2003/05/21 |
| 1 | İ | | US-PGPUB; | 15:35 |
| 1 | 1 | | EPO; JPO; DERWENT; | 1 |
| 1 | 1 | | IBM TDB | 1 |
| _ | 158 | (438/635).CCLS. and @ad<=20010613 | USPAT; | 2003/05/21 |
| | 100 | (15070557100EBS: and Gad<-20010015 | US-PGPUB; | 15:34 |
|] | | | EPO; JPO; | 13.3. |
| 1 | 1 | | DERWENT; | |
| } | 1 | | IBM_TDB | |
| - | 627 | (438/778).CCLS. and @ad<=20010613 | USPAT; | 2003/05/21 |
| Į. | 1 | | US-PGPUB; | 15:35 |
| 1 | 1 | | EPO; JPO; | 1 |
| 1 | 1 | | DERWENT; | 1 |
| 1 | 400 | /420 /3501 | IBM_TDB | |
| 1 - | 400 | (438/758).CCLS. and @ad<=20010613 | USPAT; US-PGPUB; | 2003/05/21 |
| 1 | | | EPO; JPO; | 15:36 |
| 1 | l | | DERWENT; | 1 |
| | İ | | IBM TDB | |
| - | 457 | (257/411).CCLS. and @ad<=20010613 | USPAT; | 2003/05/21 |
| | 1 | | US-PGPUB; | 15:36 |
| | | | EPO; JPO; | |
| | | | DERWENT; | ! |
| | | | IBM_TDB | |
| _ | 631 | (438/240).ccls. and @ad<=20010613 | USPAT; | 2003/05/21 |
| | 1 | | US-PGPUB; EPO; JPO; | 15:37 |
| | } | | DERWENT; | 1 |
| | ļ. | | IBM TDB | 1 |
| - | 102 | (438/216).ccls, and @ad<=20010613 | USPAT: | 2003/05/21 |
| | | , | US-PGPUB; | 15:37 |
| 1 | | | EPO; JPO; | |
| | | | DERWENT; | 1 |
| | | | IBM_TDB | |
| - | 275 | (438/591).ccls. and @ad<=20010613 | USPAT; | 2003/05/21 |
| 1 | | | US-PGPUB; | 15:37 |
| 1 | | | EPO; JPO; DERWENT; | |
| | | | IBM TDB | 1 |
| 1 - | 739 | (438/585).ccls. and @ad<=20010613 | USPAT; | 2003/05/21 |
| i | 1 | | US-PGPUB; | 15:38 |
| 1 | 1 | | EPO; JPO; | |
| 1 | 1 | | DERWENT; | |
| 1 | | | IBM_TDB | |
| - | 170 | | USPAT; | 2003/11/06 |
| ĺ | 1 | 'Lanthanum oxide' | US-PGPUB; | 09:11 |
| 1 | 1 | | EPO; JPO; DERWENT; | 1 |
| - | 1 | | IBM TDB | |
| l - | 2 | "20010013629" | USPAT; | 2003/11/05 |
| 1 | " | | US-PGPUB; | 14:41 |
| 1 | 1 | | EPO; JPO; | - |
| 1 | 1 | | DERWENT; | |
| } | | | IBM TDB | |
| - | 2 | "20020192974" | USPAT; | 2003/11/05 |
| l | [] | | US-PGPUB; | 14:41 |
| | 1 | | EPO; JPO; | |
| 1 | 1 | | DERWENT; | |
| | | | IBM TDB | |